PTO/SB/21 (09-04) Approved for use through 07/31/2006, OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/675,138 TRANSMITTAL Filing Date 09/30/2003 RECEIVED First Named Inventor FORM Harjula Art Unit 1724 **Examiner Name** Cintins (to be used for all correspondence after initial filing) Attorney Docket Number 7212.3001.002 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC Fee Transmittal Form Drawing(s) Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal.Communication to TC Petition Amendment/Reply (Appeal Notice, Brief, Reply Brief) Petition to Convert to a Proprietary Information After Final **Provisional Application** Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please Identify Terminal Disclaimer **Extension of Time Request** below): Request for Refund Express Abandonment Request CD, Number of CD(s) Information Disclosure Statement Landscape Table on CD Certified Copy of Priority Remarks Document(s) Reply Brief Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name William J. Schramm, P.C. Signature Printed name William J. Schramm Date Reg. No. April 25, 2007 24,795 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: Signature Date April 25, 2007

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF APPEALS AND INTERFERENCES

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REPLY BRIEF

Applicant:

Risto Olavi Harjula

Serial No..

10/675,138

Filed:

September 30, 2003

For:

ANTIMONY SILICATE SORBENT

FOR REMOVAL OF METAL IONS

Group Art Unit:

1724

Examiner:

Ivars C. Cintins

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REPLY BRIEF PURSUANT TO 37 CFR 41.41

The Examiner's Answer was mailed March 14, 2007. Applicant hereby submits the

Reply Brief, by and through his attorney, William J. Schramm.

I. Claim 22 is not anticipated by BEDARD, United States patent 5,858,243

Claim 22 includes the phrase "consisting essentially of"

On page 3 of the Examiner's Answer, the examiner states:

"Also, since applicant has not <u>shown</u> that the presence of titanium and the recited material would materially change the characteristics of Applicant's invention, the "consisting essentially of" language recited in line 2 of claim 22 has been construed as equivalent to comprising."

The appeal brief of applicant directly addressed this issue.

The '243 patent shows at column 2, lines 26 and 54 and in particular that portion of the formula disclosed below:

$$\{M(x) Ti (1-x) Ge(y)\}$$

Titanium must always be present. For example, when y is the smallest amount, 0, then M and titanium are present in equal amounts. When y however is greatest, 0.75, then Ge plus titanium likewise are there.

The Declaration of Dr. Alan MINIHAN showed that poor results were obtained utilizing titanium doped antimony silicate. The conclusion reached by the declarant in paragraph seven states:

From these data it was concluded that Ti was an undesirable dopant for antimony silicate to be used for extraction of radioactive metals from acid solution and work on this dopant was not progressed.

The test results supplied clearly demonstrate to one of skill in the art that titanium is undesirable as a dopant for antimony silicate.

If titanium is undesirable, then the language "consisting essentially of" is pertinent, and it excludes titanium.

II Claims 2-4, 17 – 19 and 22 were rejected under 35 USC 103 (a) as being unpatentable over the 243 patent

The examiner argues at the bottom of page 3, and the top of page 4:

"it would have been obvious to one of ordinary skill in the art at the time the invention was made to select a combination of antimony with niobium or tantalum as constituent "M".

This is the same argument as that under section 102. The reference does not disclose the claimed invention when taking into account the words "consisting essentially of."

Titanium is an absolute requirement of the 243 reference, and it is an undesirable material in the claimed invention.

III Claims 7, 9, 10, 20 and 21 are rejected under 35 USC 103 (a) as being unpatentable over the 243 reference and further in view of U.S. patent 5,888,398 (Dietz et al.).

It is to be noted that for this rejection to be applied that the 243 reference must be applicable. It is applicant's positioned that the reference is not applicable. The examiner stated at the bottom of page 4:

"... it would have been obvious to one of ordinary skill in the art at the time the invention was made to treat a nuclear waste stream of the type recited... by the process of Bedard..."

The process of Bedard is not applicable. The material disclosed requires titanium which is not in Applicant's claims.

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The references are not properly combinable. The 243 reference does not disclose the use

of acidic material. The secondary reference utilizes a highly complex organic material.

The disclosures therefore are significantly different.

SUMMARY

It is respectfully submitted that all claims are patentable for the reasons outlined above. It is believed that no fee is due. Authorization is hereby given to charge any additional fees to applicants' attorney's Deposit Account No 50-3865.

Respectfully submitted,

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Date: April 25, 2007